|  |  |
| --- | --- |
| **Evaluation/Monitoring Plan**  **Measurement Methods** | Goat health monitored before and after browse rotations using:   * Famacha tests (for worms) * Weight   Vegetation sampled before and after browse treatments using nested quadrats in a stratified random design to determine:   * Shrub/sapling density & cover * Herb presence/absence & cover * Litter depth after treatments   All trees measured for DBH & mapped  Soil compaction evaluated for each paddock after treatments  Goat follows performed to determine composition of diet throughout both rotations |
| **Inputs** | Goats   * Herd of ~80 goats * Fencing   Time for:   * Goat management and maintenance * Vegetation sampling   Equipment for:   * Clearing and maintaining fence lines |
| **Activities** | Study of rotational goat grazing   * Five replicate blocks containing * Three treatments: light and heavy browse and a control   Study of interseeding   * Treatment paddocks split with one half randomly chosen for interseeding |
| **Outputs** | A masters thesis on the impacts of a second year of rotational grazing on vegetation and goat health  One or more field days hosted for local livestock producers and land managers  One or more peer-reviewed journal articles  Presentation of results in livestock producer and/or land manage-ment conferences |
| **Expected Outcomes** | **Short Term:**  Private landowners and livestock producers as well as land managers learn both production and conservation benefits of rotation grazing in overgrown open oak systems  **Intermediate:**  Goat producers and land managers collaborate independently on small scale projects to improve ecological quality & increase productive grazing land  **Long Term:**  Larger scale, multi-year partnerships between goat producers and land managers |